

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: BRIAN THINH-VINH TRAN ET AL.

Serial No.: 10/709,415

Group Art Unit: 2166

Filed: 5/04/2004

Examiner: Johnese Johnson

Title: *Self-Adaptive Prefix Encoding For Stable Node Identifiers*

**REPLY BRIEF**

Attn: Board of Patent Appeals and Interferences  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

In response to the Supplemental Appeal Brief filed 4/14/2008, the Response to Notice of Non-Compliant Appeal Brief filed 4/24/2008, and the Examiner's Answer dated 7/11/2008, Applicants submit the following reply.

### **REMARKS**

This Reply Brief is in response to the Examiner's Answer dated 7/11/2008. Reconsideration of this application is respectfully requested in view of the foregoing remarks. In addition, all of the arguments in the appeal briefs of 4/14/2008 and 4/24/2008, and prior responses should also be considered in support of the claimed elements provided in the present invention.

### **STATUS OF CLAIMS**

Claims 1-16 are pending.

Claims 1-16 are rejected.

Claims 1-4, 9 and 14-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hu (U.S. Patent 7,274,671), in view of Bunton (U.S. Patent 5,151,697), and further in view of O'Neil (U.S. Patent 6,889,226).

**Claims 1-16 are hereby appealed.**

### **RESPONSE TO EXAMINER'S ANSWER**

In Applicants' previously submitted Appeal Brief of 04/28/2008, Applicants specifically sought out a clarification regarding claims 5-8 and 10-13 as they were improperly **omitted** in the status listing of the Examiner. The Examiner appears to have ignored the call for clarification as the Examiner once again improperly summarizes the "Grounds of Rejection" under section (9) by omitting the status of claims 5-8 and 10-13.

Specifically, the Examiner states that "Claims 1-4, 9, and 14-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hu (U.S. Pat. No. 7,274,671), in view of Bunton (U.S.

Pat. No. 5,151,697), and further in view of O'Neil (U.S. Pat. 6,889,226).” However **absent** from the Examiner’s summary once again is a statement regarding the status of claims 5-8 and 10-13 outlining the references relied on by the Examiner, as per guidelines set forth in the M.P.E.P. Again, Applicants wish to note that the response provided both in the Appeal Brief of 04/28/2008 and the current Reply Brief is based on the assumption that only the combination of Hu, Bunton, and O’Neil references are used in the rejection of claims 5-8 and 10-13. Applicants once again requests clarification if this assumption is incorrect.

Further, with respect to Applicants’ Arguments presented in the Appeal Brief of 04/28/2008 with regards to claims 1, 9, and 16, the Examiner, in page 14 of the Examiner’s Answer, makes an ambiguous statement that Applicants argument regarding “sequentially assigning to descendants of a root node a local identifier having an even value and a length equal to said base length chosen in said choosing step, wherein said local identifiers are assigned in increasing value from leftmost children to rightmost children” is **NOT** a valid argument as the claims are *“quite different than what is argued”, and further suggests that “if the applicant wishes to have the claims teach what he is arguing, he should amend them to do just that”*.

Applicants respectfully disagree with the Examiner’s ambiguous conclusion as the pending claims (a copy of which was supplied in the Appeal Brief of 04/29/2008) contradicts the Examiner’s claim. Applicants have reproduced below excerpts from the pending claims that contradict the Examiner’s assertion.

For Example, claim 1 recites the step of “sequentially assigning to descendants of a root node a local identifier having an even value and a length equal to said base length chosen in said

choosing step, wherein said local identifiers are assigned in increasing value from leftmost children to rightmost children”, which is verbatim of what was argued. Applicants wish to bring to the Board of Patent Appeals and Interferences’ notice that such similar language also appears in independent claim 9.

Also, independent claim 16 recites a step of “sequentially assigning to descendants of a root node a local identifier having an even value and a length equal to said base length chosen in said choosing step, wherein said local identifiers are assigned said even values based on variable-length binary string encoding and said local identifiers are assigned in increasing value from leftmost children to rightmost children”.

By contrast, the Examiner states on the last paragraph page 14 of the Examiner’s Answer that “What is actually claimed is ‘sequentially assigning to descendants of a root node a local identifier having an even value and a length equal to said base length chosen in said choosing step, **wherein said local identifiers are from leftmost children to rightmost children.**” The Board of Patent Appeals and Interferences is respectfully requested to compare the bolded portion of the Examiner’s citation and compare it against the above-presented citations from pending claims 1, 9, and 16. When such a comparison is made, it should be abundantly clear that the bolded portion of the Examiner’s statement is an incorrect reproduction of Applicants’ claim language as it omits parts of the claim language. Claims 1 and 9 recite “**wherein said local identifiers are assigned an increasing value from leftmost children to rightmost children**”, with the italicized words representing language that was omitted in the Examiner’s citation. Similarly, claim 16 recites “**wherein said local identifiers are assigned said even values based on variable-length binary string encoding and said local identifiers are assigned**

*in increasing value from leftmost children to rightmost children*”, with the italicized words representing language that was omitted in the Examiner’s citation.

Also, as can be seen from the above-presented evidence, Applicants’ arguments are in fact **fully supported** by the claims and require no further amendment. **Applicants respectfully request the Examiner to review the pending claims and clarify the ambiguous statement regarding not being able to find the argued language in the claims.** Applicants respectfully assert that they have argued the language as presented in the pending claims.

Also, on page 14 of the “Response to Arguments” section of the Examiner’s response, the Examiner reiterates that **“Hu clearly discloses the root node have a value of zero in column 3, lines 3-4”** and that **“the root of a tree is always at level zero”**. Applicants reemphasize that the Examiner’s citation merely states that the root belongs to “layer 0” or the top layer and make no mention of a node identifier or the step of assigning a zero value to the node identifier of the root.

Further, as was argued previously, the top most node in Hu is a set of all symbols (i.e., A, B, C, D, E, F, G, and H) and NOT, as the Examiner maintains, a root node with an assigned value of zero. Further, it should be noted that the set of symbols (i.e., A, B, C, D, E, F, G, and H) are **not assigned any values** in Figure 3 of Hu, but merely represent **the set that is used in partitioning**.

Also, as mentioned previously, the Examiner’s citation of Figure 3 merely shows **the iterative partitioning of a group of nodes (i.e., A, B, C, D, E, F, G, and H), wherein the**

**partitioning of groups is based on probabilities.** For example, the group of elements A, B, C, D, E, F, G, and H is first partitioned into **zero group** A, B, C, E and **one group** D, F, G, H. This partitioning is repeated iteratively. Such iterative partitioning **CANNOT** be equated to Applicants' feature of sequentially assigning to descendants of a root node a local identifier having an even value and a length equal to a chosen base length, wherein said local identifiers are assigned in increasing value from leftmost children to rightmost children. Further, it should be emphasized that the iterative partitioning shown in Figure 3 of Hu fails to teach **any assignment of identifiers to descendants of a root node.**

Further, with respect to claims 1, 9, and 16, Applicants made specific arguments regarding Applicants feature of "**assigning node identifiers by concatenating local identifiers of all nodes along a path from a root node to a node to which a node identifier is currently being assigned**". Specifically, it was argued, with an illustrative example, that **the concatenation mentioned in Bunton relates to the concatenation of alphabets and NOT as the Examiner suggests concatenation of codes.** **Such concatenation of alphabets CANNOT be equated to concatenation of local identifiers for the purpose of assigning node identifiers.** It is respectfully emphasized that the Examiner, in the "Response to Arguments" section, fails to address any of these arguments made in the Appeal Brief submitted on 04/29/2008. Such omission of arguments is not in line with the prescribed guidelines set forth in the M.P.E.P.

Hence, at least for the reasons set forth in the Appeal Brief of 04/29/2008 and the current Reply Brief, Applicants submit that a prima facie case of obviousness has **NOT** been successfully established with respect to independent claims 1, 9, and 16. Hence, Applicants respectfully assert that an improper 35 U.S.C. §103 rejection was issued with regards to

independent claims 1, 9, and 16 as the cited combination of Hu, Bunton and O'Neil references fail to teach or suggest many of the features of Applicants' pending claims 1, 9, and 16.

Since the dependent claims inherit all the features of the claim from which they depend, Applicants also submit that an improper 35 U.S.C. §103 rejection was also issued with regards to dependent claims 2-8 and 10-15.

### **SUMMARY**

None of the references, cited or applied, provide for the specific claimed details of applicants' presently claimed invention, nor renders them obvious. It is believed that this case is in condition for allowance and reconsideration thereof and early issuance is respectfully requested.

As this Reply Brief has been timely filed within the set period of response, no petition for extension of time or associated fee is required. However, the Commissioner is hereby authorized to charge any deficiencies in the fees provided to Deposit Account No. 09-0460.

Respectfully submitted,

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